



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/649,381 Group Art Unit: 3641
Filing Date: August 27, 2003 Attorney Docket No.: M-104-D
First Named Inventor: Aghajanian, Michael K.
Title: Ceramic-rich Composite Armor, and Methods for Making Same

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Dear Sir:

In regard to the Notice of Allowability dated February 10, 2005 regarding the above-identified patent application, and specifically in regard to the Examiner's Reasons for Allowance attached thereto, Applicants provide the following remarks.

REMARKS

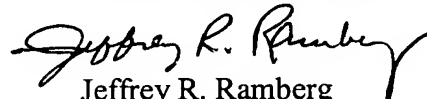
Claims 1, 6, and 8-37 are allowed, as indicated in the Notice of Allowance dated February 10, 2005. The Notice of Allowability attached thereto also provided reasons for allowance:

Applicant's claim language reads over what is considered to be the closest prior art (Taylor et al.) with regard to at least claim limitations directed to "said backing layer comprising at least one fiber-reinforced plastic material" and "said ceramic-rich composite body has a hardness of at least about 1100 kg/mm² as measured with a Vickers indenter using a 1 kg load".

Applicants appreciate that there may be several reasons for allowance. Among these reasons, and in response to the reasons stated by the Office, Applicants respectfully submit that one such reason that is quite significant to the Applicants is that Taylor neither discloses nor suggests the claimed fine-grained microstructure, particularly that of independent claim 1, wherein the filler material bodies exhibit no more than a small or slight degree of interconnectivity of the bodies making up the filler material(s). In contrast, Taylor has a portion of his boron carbide filler bodies participate in a chemical reaction with his silicon infiltrant. It has been Applicants' experience that such reaction is deleterious if one's objective is in maintaining or preserving a small or slight degree of interconnectivity of the bodies making up the filler material; that is, to prevent the development of more extensive contiguity or "connectedness" of the filler material bodies.

Should the Office deem that any further action on the part of Applicants would be desirable, the Office is invited to telephone Applicants' undersigned representative.

Respectfully submitted,


Jeffrey R. Ramberg
Reg. No. 34,700

May 10, 2005

c/o M Cubed Technologies, Inc.
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PAYMENT OF ISSUE FEE

Dear Sir:

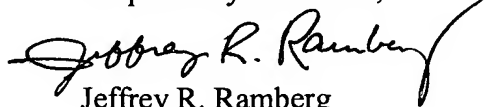
In regard to the Notice of Allowance and Fee(s) Due dated February 10, 2005, Applicants submit herewith the Issue Fee for the above-identified patent application.

Specifically, Applicants submit the Issue Fee Transmittal (Form PTOL-85B), along with Check No. 805 in the amount of \$715.00 to cover the cost of the small entity Issue Fee under 37 C.F.R. §1.18(a), and five (5) advanced copies of the patent. The Commissioner is authorized to debit any deficiency or credit any overpayment to the undersigned's Deposit Account No. 50-1020.

Enclosed in this same mailing are a set of substitute (formal) drawings, a proposed Amendment After Allowance, and Comments on the Reasons for Allowance.

Should the Patent Office deem that further action is required on the part of Applicants, the Office is invited to contact Applicant's undersigned representative.

Respectfully submitted,


Jeffrey R. Ramberg
Reg. No. 34,700

May 10, 2005

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ATTN.: PUBLISHING DIVISION

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SUBMISSION OF REPLACEMENT DRAWINGS PURSUANT TO MPEP 608.02(z)

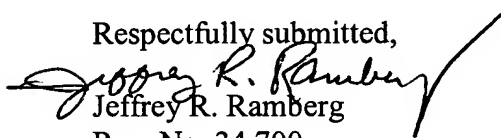
Dear Sir:

Applicants submit herewith as an Appendix a set of formal drawings. Please substitute these formal drawings for the informal drawings that are presently on file.

Applicants respectfully submit that the new drawings add no new matter to the present application, but merely correct obvious informalities in the original drawings.

Should the Drafting Branch or the Publication Branch of the Patent Office have any questions or comments concerning this submission, the Office is invited to contact applicants' undersigned representative.

Respectfully submitted,


Jeffrey R. Ramberg
Reg. No. 34,700

Enclosures: Appendix : 4 sheets of formal drawings

May 10, 2005

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Certificate of Mailing Under 37 §CFR 1.8

I hereby certify that the following correspondence is being deposited on the date shown below with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to *Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450*:

Payment of Issue Fee cover letter

Submission of Replacement Drawings Pursuant to MPEP §608.02(z)

Comments on Statement of Reasons for Allowance

Amendment After Allowance

Form PTOL-85B (Fee Transmittal)

Transmittal; Check No. 805

Return Receipt Postcard

May 10, 2005
Date

Jeffrey R. Ramberg
Signature

Jeffrey R. Ramberg
Typed or printed name of person signing Certificate



PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/649,381
	Filing Date	08/27/2003
	First Named Inventor	Aaghajanian, Michael K.
	Art Unit	3641
	Examiner Name	Johnson, Stephen M.
Total Number of Pages in This Submission	Attorney Docket Number	M-104-D

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input checked="" type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): (1) Payment of Issue Fee cover ltr (2) Certificate of Mailing (3) Check No. 805 (4) Return Receipt Postcard
<div>Remarks</div>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	c/o M Cubed Technologies, Inc.		
Signature			
Printed name	Jeffrey R. Ramberg		
Date	05/10/2005	Reg. No.	34,700

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name	Jeffrey R. Ramberg	Date	05/10/2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.